

***Burning Man 2001***  
***Final Environmental Assessment NV-020-01-18***

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## INTRODUCTION / PURPOSE AND NEED

### 1.1 Introduction

The Black Rock Desert Region (*Map 1*) is a favorite recreation area for thousands of people. Visitors enjoy recreational pursuits individually or in small groups for casual or dispersed activities, while others participate in organized events as participants or spectators. Each year more and more people are discovering the Black Rock Desert and its many recreational opportunities. In December 2000, The Blackrock Desert - High Rock Canyon Emigrant Trails National Conservation Area (NCA), public law 106-554, was passed by the 106<sup>th</sup> Congress. The NCA legislation designated about 797,000 acres of public land as part of the NCA and approximately 757,500 acres as Wilderness areas. The proposed Burning Man event would be partially located within the NCA boundary.

### 1.2 Purpose and Need for the Proposed Action

The BLM has received a special recreation permit application from **Black Rock City LLC** for the Burning Man 2001 Burning Man project. Burning Man is a combination art festival, social event, and experiment in community living.

### 1.3 Background

The Burning Man project was first held in 1990 and has continued on an annual basis. Table 1 shows how the event has grown from 1991. Burning Man applied for and received a multi-year permit to conduct the event from BLM for the years of 1992-1995. Due to the increasing size and associated issues with the event, the Burning Man organization applied for and received a special recreation permit (SRP) from the BLM in 1996. In 1997, Burning Man was held on private land on Hualapai Flat in Washoe County, NV. In 1998, Burning Man was moved back onto public lands at the southern end of the Black Rock Desert playa, about four miles north of Gerlach. The site was moved in 1999, ½- mile north of the 1998 site in order to improve the site due to problems with mud. In 2000, the event was held approximately 8 miles northeast of Gerlach (see 2000 Burning Man EA - Alternative 4) Burning Man acquired SRPs from the BLM for the years of 1998, 1999 and 2000. Over time the Burning Man project has experienced increasing growth in participant numbers and space requirements.

Table 1, Burning Man Special Recreation Permit Participant Attendance, 1991-2000`									
1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
250	600	1,000	2,000	4,000	8,000	10,000	14,500	23,600	26,000
Sources: BLM Special Recreation Permit Post-Use Reports, Recreation Management Information System Reports, & Burning Man records.									

## 1.4 Issues

The BLM conducted three public meetings in Nevada to discuss the Burning Man 2000 *Proposed Action* and received public comments. The first meeting was held on 2/29/00 in Reno. The second meeting was held in Gerlach on 3/1/00, with the third meeting held in Lovelock, on 3/2/00. In addition to oral comments generated from the meetings, the BLM received numerous written comments. It is anticipated that the number of participants for the 2001 event would be similar to the number of participants who attended the 2000 event.

For the 2001 event proposal, a letter was sent to the interested public on April 6, 2001, soliciting input. The letter was also posted on the BLM Winnemucca Field Office website. The BLM received 15 responses to the letter. The following is a summary of issues identified.

**Access** - The event would limit access to the playa and conflict with other dispersed recreation uses.

**Adverse Playa Impacts/Playa Degradation** - Moving the site would create new resource impacts to the playa, no analysis on Parma dunes, clean up of old sites not completed.

**Public Health** - Insufficient sanitation facilities and inspectors.

**Event Security/Infrastructure issues associated with event location.**

**Sufficient Fees/Monitoring of attendance.**

**Morality & Values.**

**Monitoring** - Moving the event would not allow for evaluating impacts from the event over time.

**Confusion over public notification/NEPA process.**

## **1.5 Conformance With The Land Use Plan**

The *Proposed Action* and *Alternatives* herein described are in conformance with the BLM land use plans for the area. The Sonoma-Gerlach Management Framework Plan (MFP), dated July 9, 1982, is the land use plan that applies to this area within the Winnemucca Field Office (WFO). This plan provides for multiple use management of the Black Rock Desert, while promoting the following general management goal applicable to this permit application: Objective R-1 is to "provide as many recreation opportunities as possible without undue environmental degradation in the Sonoma-Gerlach Resource Area." The MFP further states that it is Bureau policy to "provide a variety of outdoor recreation use on Bureau-administered lands commensurate with public needs and resources potentials and consistent with a quality environment." Section 5(C)(3) of the NCA legislation allows for the Secretary "to permit large-scale events in defined, low impact areas of the Black Rock Desert playa."

## **1.6 Relationship To Statutes, Regulations Or Other Plans**

The *Proposed Action* has been reviewed for compliance with BLM policies, plans, and programs. The proposal is in conformance with the Sonoma-Gerlach Grazing EIS, the Sonoma-Gerlach Management Framework Plan and Special Recreation Permit regulations at §43 CFR 8372.

## **2.A DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

This environmental assessment analyzes the *Proposed Action* and two *Alternatives*:

- ◆ *Proposed Action*, Conduct the event approximately 1,800 feet northeast of the 2000 location.
- ◆ *Alternative 1*, No Action - no event would be permitted.
- ◆ *Alternative 2* - Conduct the event at the 2000 location- Agency Preferred Alternative.

### **2.1 Proposed Action**

Burning Man has submitted a special recreation permit application for Burning Man 2001 to construct a temporary city called Black Rock City LLC. The city would accommodate approximately 25,000-30,000 participants.. In addition, the proposal includes a change in the event location approximately 1,800 feet northeast of the 2000 event and would include a passenger plane airstrip. The permit period would extend from August 1, 2001 to September 28, 2001, with the actual Burning Man event occurring from August 27, 2001 through September 3, 2001

Activities associated with the Burning Man event include artistic and technological displays, entertainment events, performing arts, theme camps, spontaneous social interactions and the ritualistic burning of a 50 foot tall wooden sculpture called "The Man." Participants would also camp, ride bicycles, landsail and explore within the area permitted by this event.

The proposed 2001 site location would be approximately 1,800 feet northeast of the 2000 event site (8.0 miles northeast of Gerlach), centered on the Black Rock Desert playa (see map ).The Black Rock City would be zoned into residential areas (theme camps), art displays, and performance art. The city would be laid out in an arc centered on the sculpture of the “Man.” The arc would have a radius of 4000 feet. The total area encompassed by Black Rock City within the pentagon would be about 2,560 acres.

The location of Black Rock City for the *Proposed Action* would be T33N, R24E, Section 3 MDB & M.

T33N, R24E, Sections 2, 3, 4, 10, & 11  
T33½N, R24E, Sections 34, 35

The location of Black Rock City for *Alternative 2 - Conduct the Burning Man 2001 event at the Burning Man 2000 event - Agency Preferred Alternative* is;

T33N, R24E, Sections 2,3,4,9, 10, & 11  
T33½N, R24E, Sections 34, 35

The location for the airstrip would be;

T33N., R24 E., Sections 9, 10, & 16

*Map 1* shows the use relationships between past 2000 Burning Man site and the proposed 2001 Burning Man site.

## **2.2 Event Set Up and Signing**

Burning Man site preparation would include preliminary surveying and constructing the planned trash/security fence on August 1st, 2001. The fence would be approximately 8 to 9 miles in length and would be scheduled for completion by August 20, 2001. T-Stakes used in construction of the fence would have light reflectors attached on the top of the posts to enhance night visibility. In addition, warning signs alerting vehicles of the fence location would be installed. Survey and construction of the gate area and marking of the entry road, and the roads of Black Rock City would also begin on August 1, 2001.

On August 15, 2001, installation or construction of signing for vehicular and pedestrian control both on- and off-site, light spires, street signs, road signs, central camp structures, large sculptures, porta-potties, the Gate Area, the main entry road and other infra-structure facilities would begin. While it is Burning Man’s policy that no holes be dug by participants, holes may have to be dug for certain authorized facilities, such as “Art Burns” and “The Man.” These would be approved in advance by BLM. Camp infrastructure construction would be completed by August 25, 2001, leaving five days before the event for fine tuning and rectifying any unscheduled delays.

## **2.3 Traffic Control**

Off site traffic control would be provided. The following areas would be monitored and controlled during peak traffic patterns.

- \* 12 mile entrance to the Black Rock Desert and State Route 34.
- \* 3 mile entrance to the Black Rock Desert and State Route 34.
- \* BLM entrance to the Black Rock Desert and State Route 34
- \* The intersection of State Route 34 and Route 447.
- \* The town of Gerlach.
- \* The town of Empire.

The access route to the proposed new location would be clearly marked along State Route 34. area. There would be two main access roads to the event, the 12 Mile access and the BLM access. Both access roads would lead to a central gate area. On-site traffic control would be accomplished by having participants park their vehicles, as assigned by Burning Man, and either walk or ride bicycles throughout the event area.

## **2.4 Event Security and Public Safety**

### *1. Law Enforcement - On Site*

On site event law enforcement would be provided by the BLM, Pershing (PSO) and Washoe County (WSO) sheriffs' offices who would enforce federal, state, and local laws and regulations.

### *2. Law Enforcement - Off Site*

BLM Rangers would patrol and control the outside perimeter of Black Rock City, enforcing a no camping and no shooting closure on public land beyond the trash/security fence. BLM Rangers would patrol several key areas of concern, including:

1. The 3-mile entrance to the Black Rock Desert
2. 12-Mile playa access
3. Trego Hot Springs
4. Black Rock Hot Springs
5. The visible portion of the Applegate/Lassen and Nobles Trails and the towns of Gerlach and Empire.
6. 3-Mile playa access
7. The BLM entrance to the playa
8. Accessible areas along the High Road access.
9. The Union Pacific railroad tracks.
10. The event trash/security fence.

11. Sensitive areas designated, such as the Applegate/Lassen and Nobles Trail Cutoff, Trego Hot Springs, Black Rock Hot Springs, Double Hot Springs, hot springs in the Soldier Meadows area and others;
12. The towns of Gerlach and Empire.
13. Environs in and around Black Rock City.

The WSO and PSO would patrol and control several key sections of the perimeter fence. The Black Rock Rangers (BRR) would coordinate and work with the various law enforcement agencies. The BRR would patrol several key areas listed as items 1-8 above.

### 3. *Security - On site*

Burning Man would supply event security, with their BRRs. The BRRs would coordinate, backup, and would host a daily coordination meeting between law enforcement and the BRRs. There would be two BRR outposts situated within the Black Rock City. The BRRs would be involved as the first point of resolution for matters of concern within the Black Rock City boundary.

### 4. *Communications*

The central communication system would have separate communication channels for the following functions:

1. Security ( BLM, P/WSO, BRRs, Fire, Medical, and Regional Emergency Medical Services Authority (REMSA)
2. Camp Construction and City Maintenance
3. Artists and Performance
4. Food and Commissary
5. Community Access and Gate.

The BRRs would maintain a central communication system at BRR Headquarters which would provide 24 hour a day capacity to detect and respond to any emergent security or safety circumstance. The communications system would incorporate an Incident Command System (ICS). Approximately 75 radio-equipped BRRs would be trained on ICS protocols and correct radio usage.

Using the ICS would facilitate communication between the BRRs and outside agencies in the event of an emergency. The radio system facilitates inter-agency communication and cooperation by including the BLM, PSO, WSO, Fire, and Medical. In the event of an emergency, the radio system would work to allow timely responses and to inform the relevant agencies of the location of the emergency.



## 5. *Illegal Substance Policy*

Black Rock City LLC has adopted an illegal substance policy and will use the BRC communications network to educate participants of applicable federal, state and local laws concerning the sale of illegal substances. The Burning Man “Survival Guide” would specifically warn participants of the health risks associated by consuming illegal drugs or alcohol in a harsh environment. Information would be released indicating that federal, state, and local drug enforcement officials will be at the event and would include undercover enforcement personnel.

## 6. *Medical*

Representatives from REMSA would be located in the center of Black Rock City. This station would be fully staffed with an ambulance, medical equipment, at least one doctor (two are planned) and certified emergency medical technicians (EMTs). REMSA medical services would also be located at the two BRR outposts within the Black Rock City.

### **2.5 Resource Management**

BRRs, BLM staff and volunteers would provide monitoring of public lands to prevent resource damage from potential participant visits to area resources near the the event, including the Soldier Meadows area. BLM staff or volunteers would also monitor general playa resources as well. BRC also proposes to continue its policy to charge a substantial “in-out” fee to people who leave and return to the event in order to reduce the potential of adverse impacts to surrounding resources.

Black Rock Rangers and volunteer groups would receive an orientation regarding safety, area ecology, cultural resource protection and the role that they are to play. The art of non-confrontational conflict resolution would be addressed. To address specific aspects, BLM staff would also participate in the orientation and coordinate with the BRRs.

The basic strategy would be to monitor the hot springs in the area. This would be done using two-person teams for the duration of the event. Sites would be visited and resource damage or other transgressions observed, such as illegal artifact collection, would be reported to BLM law enforcement.

### **2.6 Fire Management**

Two types of fire use would occur: Group Campfires and Art Burns. Burning Man would construct and supply approximately 200 campfire places made of 55 gallon steel drums cut in half. These would be placed throughout the site and used as group campfires for various theme camps, villages or as communal warming fires.

This fire pan design would prevent the playa from "firing" (turning the playa surface a dark brownish red) from the heat and facilitate cleanup. For Art Burns, the burning of larger art structures, 35 locations would be selected in the unoccupied area between theme camps and "the Man." These sites would have corrugated metal sheets or fire blankets laid down under the burn to reduce or eliminate surface "firing."

The proposed site lacks vegetation and is therefore not an area for a range-type fire. Fire suppression efforts would be directed toward camp/vehicular (structural) incidents. Burning Man would contract fire services and establish the Black Rock Rangers Volunteer Fire Department, which would operate under the Incident Command System on fire-related events within the Black Rock City. A number of fire trucks and various support equipment would be provided as identified under Fire Suppression Section in the "Burning Man 2001, Operating Plan." Trucks would be stationed at each end of Black Rock City during the event part of the permit period. A minimum on-site water storage of 12,000 gallons for suppression efforts would be required.

## **2.7 Dust Abatement**

BRC would provide two 4,000 gallon water trucks for dust suppression. These trucks would be in operation from August 20th through September 3rd as needed. Water trucks would operate to suppress dust during event exit and the entire site after exit to preclude public safety hazards from dust obscuration (white- or brown-outs). No dust control additives, such as (MgCL) would be used or added to water for dust suppression activities.

## **2.8 Runway and Aircraft**

Burning Man 2001 proposes a temporary runway for small aircraft. The runway would be a Federal Aviation Administration (FAA) approved temporary runway facility and would be approximately 60 feet wide by 5,000 feet in length and is located southeast of the perimeter fence T33N., R24E., Secs. 9, 10, 16 (see map). The runway would be set up in a southwest to northwest direction taking advantage of prevailing winds. The runway would be delineated by placement of orange cones and signing, to deter vehicle traffic from entering the area. Numbers at both ends of the runway would indicate compass bearing and help define boundaries. A compass rose would also be painted. The numbers and rose would be painted on the playa surface using a calcium carbonate/water suspension that would readily breakup and dissolve during cleanup and weathering. The same material has been successfully used during an annual golf tournament and during the 1997 land speed record event. The numbers would be raked or washed down following the event to obliterate them.

A windsock on a 20 foot steel pole would be installed adjacent to the runway. Radio communication with pilots would be provided through a Common Traffic Advisory Frequency and would inform pilots of landing pattern direction and safety information. The runway would be used by BM participants only and limited to single and twin, piston engine, fix wing aircraft. Black Rock City would prepare a NOTAM to the Federal Aviation Administration (FAA) and post as required.

No cargo or supply shipments would be allowed. The runway would be delineated with cones and monitored by law enforcement and the event runway manager(s). A detailed description of the Black Rock City Airport is provided in the "Burning Man 2001, Operating Plan."

## **2.9 Event Take Down and Clean Up**

### **1. On Site**

BRC would be committed to leaving no trace. Structure and site clean up would begin on September 4, 2001, with a proactive volunteer effort to encourage participants to clean up their sites and take their garbage home or to the approved land fill site in Lockwood, Nevada. Structure disassembly and general on-site garbage removal would begin September 8 and would be completed within two weeks. BRC would provide 30 yard dumpsters to be placed on site and filled. The dumpsters would ultimately be hauled to the Lockwood Landfill near Sparks, NV. Burn marks from fires (if these occur) would be shoveled, raked, and dragged to remove all debris and break up any hardened surface due to heat "firing." The trash/security fence would be the last structure to be removed. A detailed site inspection by BLM would occur on October 5, 2001 with a follow-up inspection taking place the following Spring.

### **2. Off Site**

Off site clean up would include County Road 34 from the 12-Mile access to the town of Gerlach and on State Road 447 from Gerlach to and including the town of Wadsworth. Crews would patrol and collect all road side trash. If necessary, other high use locations would also be cleaned, including Trego Hot Springs, and Black Rock Hot Springs, by the same method. Off site clean up would coincide with event exit and continue for several days.

## **2B. ALTERNATIVES**

### **1. ALTERNATIVE 1, NO ACTION ALTERNATIVE**

The *No Action Alternative* would require the BLM to reject the *Proposed Action* and Special Recreational Use Permit for Burning Man 2001. Black Rock City would not be constructed and a large community of people on the playa would not take place. The natural environment at the event site and access road would incur no direct or indirect impacts, either temporary or permanent in nature. In addition there would be no off-site impacts attributable to people associated with Burning Man. None of the environmental impacts associated with the *Proposed Action*, or the 2000 site *Alternative* would occur under the *No Action Alternative*. The *No Action Alternative* may conflict with the BLM's multiple use mandate as identified in the Land Use Plan.

### **2. ALTERNATIVE 2, CONDUCT BURNING MAN 2001 AT THE 2000 EVENT LOCATION - AGENCY PREFERRED ALTERNATIVE**

Under this alternative, Burning Man 2001 would use the 2000 site. This alternative would essentially be the same as the *proposed action*, with the exception of shifting the site 1,800 feet northeast from the 2,000 event location.

### **3. AFFECTED ENVIRONMENT**

#### **3.1 Critical Elements**

The following critical elements of the human environment are not present or not affected by the *Proposed Action* or *Alternatives*, and therefore are not addressed in this environmental assessment.

- *Areas of Critical Environmental Concern.*
  - *Environmental Justice*
  - *Farmlands (Prime or Unique).*
  - *Flood Plans*
  - *Noxious Weeds*
- Wetlands*  
*Wild & Scenic Rivers.*

#### **3.2 The Black Rock Desert Playa**

The Black Rock Desert landscape consists of the largest playa in North America and surrounding wind-formed mounds, sheet sands, dunes, alluvial slopes, terraces, foothills and mountains. The playa encompasses about 265 square miles (168,960 acres). The *Proposed Action* is located within the west arm of the Black Rock Desert playa, where most recreation activity occurs. The widest and longest dimensions of the west arm are about ten by twenty miles.

The playa surface is an essentially flat, non-vegetated ephemeral lake bed. Variations in surface relief develop seasonally and are not readily apparent to the eye. The wind changes the shape and size of dunes, sheets of silt and sand, and mounds. A wide, shallow depression exists where the Quinn River ponds on the playa (Quinn River Sink) south of the Black Rock Range. Standing water persists there well into summer and occasionally throughout the year.

These elements along with the occurrence of hot springs and other landform features, such as spring mounds, form a significant visual resource which has attracted increasing visitor use. The Black Rock Playa, a relict lake bed of Pleistocene Epoch Lake Lahontan, one of the major structural basins in Nevada (Sinclair 1963), is bounded on the east and west by north-south trending fault block mountain ranges (the Black Rock and Granite ranges respectively). The basins are down-dropped blocks relative to the mountain blocks and have debris-filled, U-shaped floors underlying the present landscape.

Environmental assessments NV-020-06-25, NV-020-08-25, NV-020-99-16, & NV-020-00-49 contain detailed descriptions of the *Affected Environment* of various Burning Man events. The *Affected Environment* from these documents is hereby incorporated by reference.

#### **3.3 Cultural Resources**

Several historic trail routes cross the Black Rock Desert. The 1843-44 John C. Fremont exploration party passed through the Black Rock Desert traveling south along the Black Rock Range to Great Boiling Springs near present-day Gerlach.

No trace of this exploration route remains. The Applegate Trail was a route to Oregon blazed in 1846. The Applegate-Lassen Trail, an 1848 cutoff from the main California Trail, included the Black Rock portion of the Applegate Trail. Nearly one-half of the 1849 gold rush traffic followed this trail to California. The Black Rock Desert segment of the Applegate-Lassen Trail is noteworthy because it is part of the longest stretch of emigrant trail which can be traveled by the visitor while surrounded by fairly unaltered vistas.

Because of its important role in American history and its integrity of setting, the Applegate-Lassen Trail is listed on the National Register of Historic Places and also has been designated a National Historic Trail. The 1852 and 1856 Nobles Routes, which are also listed as National Historic Trails, were cutoffs from the Applegate-Lassen Trail which crossed the playa of the Black Rock Desert. No traces of the Nobles Route remain in the vicinity of the proposed event site or the alternative sites.

The *Proposed Action* is located approximately 16.3 miles from the Applegate-Lassen Trail, adjacent to the 1852 Nobles Route, and 1 mile from the 1856 Nobles Route.

The 2000 event was located approximately 16.5 miles from the Applegate-Lassen Trail. The proposed site is located adjacent to the 1852 and 1856 Nobles Routes

Several historic campsites along the Applegate-Lassen Trail and the Nobles Route are also important. These include Black Rock Hot Springs, Double Hot Springs, and Trego Springs. Coyote Springs, also a historic site along the Nobles Route, is located approximately 3 miles from the *proposed action* and Alternative 2, Agency Preferred Alternative.

The Black Rock Desert playa is regularly disturbed by wind and water erosion as well as by vehicular traffic and large scale recreation events. Past inventories on the Black Rock Desert have demonstrated that the playa is not archeologically sensitive. Although isolated artifacts are occasionally found on the playa, these artifacts are without context due to the constant disturbance. Consequently no cultural resource inventory was undertaken for the *Proposed Action* or the Preferred Alternative. An inventory of the proposed access road, CR2-2788(N) was undertaken. This inventory was negative. The event access would cross the 1852 Nobles Route.

However, there is no trace of the trail in this area and this portion of the access, on the playa, would not be improved.

Several cultural resource inventories have been undertaken within one mile of the *Proposed Action* and the Preferred Alternative. One of these inventories, CR2-138(P) covered a small portion of the Preferred Alternative Site. These include the following:

CR2-138(P), Cultural Resources Survey for Geothermal Leasing in the Southern Black Rock Desert, was a Class II cultural resource inventory undertaken by Dan Brooks of the BLM in June of 1977.

CR2-168(P), The Seismic Exploration Inc. Project, was a Class III cultural resource inventory undertaken by Dan Brooks of the BLM in 1977.

CR2-2391(N), the Starflight Space Technologies Test Rocket Launch, was a Class III cultural resource inventory undertaken by Ken Detweiller, DAT, of the BLM in 1990.

CR2-242(N) was a Class III cultural resource inventory of U.S.G.S. N.O.I. N2-4-78 shallow temperature gradient holes undertaken by Vic Dunn, DAT, of the BLM in 1978. No sites have been recorded in or within one mile of the Proposed Action. One isolated flake, CrNV-22-717 has been recorded in the Preferred Alternative site area and three others, CrNV-22-714, -715, and -716 have been recorded within one mile of the proposed site. All of these isolates have been collected and curated.

### **Native American**

The Summit Lake Paiute Tribe and the Pyramid Lake Paiute Tribe have been contacted by letter and follow up phone conversations on past Burning Man Events. For the 2001 event, a letter was received by the BLM on June 19, 2001, from the Pyramid Lake Tribal Council. The letter identified the need for Black Rock City LLC to consult with the tribe concerning the event. In addition, traffic, potential cultural and resource issues caused from the Burning Man event were identified which impact tribal lands. No written response was received from the Summit Lake Paiute Tribe.

### **3.4 Soils and Vegetation**

The Burning Man event site is predominately on a miscellaneous landform, a playa. Miscellaneous landforms have little or no soil and thus support little or no vegetation. The playa surface texture is a silty clay loam. A minor miscellaneous landform is the transient dunes. Both the playa and the transient dunes have a slight water erosion hazard and soil blowing hazard. Transient dunes are an accumulation of playa surface particles. Wind erosion is a function of soil erodibility, roughness, climate, length of slope and vegetative cover. Increased vehicle use on the playa has changed the roughness and length of slope that soils particles travel. Increased roughness has reduced soil particle saltation, thus causing particles to accumulate on the windward side of rough areas forming transient dunes.

Lake-plain terraces consist of Ragtown silty clay loam, Mazuma silt loam and Isolde fine sand dominating the fringe areas of the playa. Both the playa and the transient dunes have a slight water erosion hazard and a moderate soil blowing hazard. The water erosion hazard is 0.37 and the wind erosion hazard is 43. The National Soils Handbook, supplement Nevada identifies erosion hazard for bare ground as:

	<u>Water</u>	<u>Wind</u>
K (Erodibility) x S (Percent Slope)	I (Wind Erodibility Group) x C (Climatic factor)	
Slight	<4	<40
Moderate	4-8	40 - 100
High	>8	>100

Soil compaction refers to densifying or increasing the unit weight of a soil mass by rolling, tamping, or vibrating. Soil densifying is simply removing the pore space from the soil unit. The most important factors that influence density are: (1) moisture content; (2) soil gradation (physical properties); (3) chemical properties (especially sodicity); and (4) type and amount of compaction effort.

The playa surface texture is a silty clay loam. A silty clay loam has a low density (estimated to be less 1.10 gram per cubic centimeter), which will have high load-supporting power when dry, but very low load-supporting power when saturated.

The playa surface is very strongly sodic (greater than an Sodium Absorption Ratio of 91 SAR). This high sodium content improves the load-supporting power when dry by dispersion of clay particles, reduces permeability and aeration, and a general degradation of soil structure. The soil structure of the playa is a strong fine platy.

### **3.5 Migratory Birds**

No migratory bird surveys have been conducted within the proposed Burning Man event site. The event takes place generally before the major winter migration of birds occurs. The seasonal lake is not a significant stopping-over point for migrant birds as there are no aquatic or shoreline vegetation communities that provide food sources.

### **3.6 Sensitive Species**

The BLM has contacted the U.S. Fish & Wildlife Service to obtain information on threatened and endangered species that may occur in the vicinity of the Burning Man Event. No listed, proposed or candidate species have been identified in the area. Attached is a list of species of concern for the Black Rock Desert Region and subsequent telephone conversation with the F&WS (record attached).

### **3.7 Water Resources**

#### **Proposed Action**

The Burning Man event site is located within the Black Rock Desert Hydrographic Region. The site itself is situated on the terminal lake/playa surface, which receives intermittent surface water flows from the Quinn River drainage and the Mud Meadow Creek drainage. Surface flows and inundation are seasonal, normally associated with spring time snowmelt and occasional thunder storms. Climatic records for the site are not available. Climatic records are available for Gerlach, approximately 8 miles to the southwest of the event site. Average annual precipitation for Gerlach is 7.96 inches, and the average annual temperature is 65.5 F.

The Burning Man event is located on a portion of one of the largest dry lake beds in North America. During a normal precipitation year, the playa is partially covered with standing water during the months of March into June. The extent and duration of standing water is dependent on weather conditions, annual precipitation and temperature regimes. The event is held in late August into early September when the playa surface is dry. The playa has been classified as a discharging playa. This designation is due to the relatively shallow water table. The approximate depth to groundwater at the site is approximately 5-10 feet. Through the acts of evaporation and capillary forces, groundwater is actively discharged to the atmosphere. This results in a vertical hydraulic gradient, moving towards the atmosphere.

No springs, seeps, wells, streams, or permanent lakes are located in, or adjacent to the event boundary. Three hot springs, Great Boiling Spring, Trego, and Black Rock Hot Springs and hot springs within the Soldier Meadows area are located outside of the Burning Man event site. These springs along with Coyote Spring may experience higher recreational visitation during the event.

### **3.8 Land Use and Access**

The main access points to the Burning Man event would be off state route 34. The access points are 12 Mile, 3 Mile and the BLM event entrance. Access to the event is restricted by installing the trash/security fence and gate entries along each side of the entrance. There are additional access entrances to the playa along the High Road and other areas. Once vehicles gain access to the playa surface, they may travel around the perimeter of the Burning Man event interfering with landsailing/airport operations. Restricting access to playa affects other public land users and is difficult for law enforcement to enforce due to the number of access points available.



## **4. ENVIRONMENTAL CONSEQUENCES**

### **4.1 Cultural Resources, Native American Values, Paleontology**

#### **Proposed Action**

Most potential adverse impacts to cultural resources would be prevented through monitoring by Burning Man volunteers, BLM volunteers, and BLM staff. Burning Man's efforts to encourage participants to stay at the event, including charging a substantial re-entry fee, monitoring of cultural sites outside of the event and Burning Man sponsored public education efforts would also help to minimize adverse impacts from unauthorized collection of artifacts or inadvertent adverse impacts from natural resource removal and other types of surface disturbance.

The proposed event site is approximately 13 miles from the Applegate-Lassen Emigrant Trail. Therefore no direct adverse impacts to Applegate-Lassen Trail or its setting are anticipated. However, as discussed in 4.4 below, while the position of the event would not preclude visitors from accessing the trail, it would present a visual intrusion for visitors accessing the historic trail from Gerlach. Although the event would only last a week, the duration, including set-up and clean up, would be over two months. Reduced set-up and clean-up periods could alleviate this situation.

Although no extant surface vestiges remain from the Nobles Trail, the original route from Black Rock Hot Spring is believed to be very near the proposed event site. Any authorized holes (see 4.3 below) required to be dug for facilities could adversely impact any buried cultural resources. Therefore, a BLM archaeologist or District Archaeological Technician would need to be available for such digging to monitor for any such resources. If unauthorized pits were excavated, buried historic trail artifacts could be adversely impacted.

Coyote Springs, a historic site on the Nobles Route, and only a mile from the *Proposed Action*, could potentially be impacted by participants or non-participants drawn to the area by the event. Monitoring of this site and public education efforts would help prevent damage to the site.

A potential indirect impact is that increased awareness of the Black Rock Desert due to the large number of participants as well as the high-profile media coverage may lead to increased use of the area and associated impacts to resources in the long term. Public education efforts associated with the event may help prevent these impacts.

#### **Native American**

On July 3, 2001, BLM, Black Rock City LLC., and the Pyramid Lake Paiute Tribe met to discuss issues associated with impacts to Tribal lands from the Burning Man event. Specifics concerning traffic congestions, motorist assistance, and issues associated with Burning Man participants using resources on the reservation were discussed. Resolution of these issues are ongoing.

### **Alternative 1, No Action Alternative**

Under the *No Action Alternative*, potential direct impacts to cultural resources, visual impacts, historic trail access, potential impacts to Coyote Springs, and other indirect impacts from increased awareness of the area would not occur.

### **Alternative 2, Conduct Event at 2000 Location- Agency Preferred Alternative**

Impacts from this alternative would be similar to those which would occur under the *Proposed Action*, except that access to historic trail visitors would only be restricted at the 3 mile access.

## **4.2      Soils & Vegetation**

### **Proposed Action**

Adverse impacts to soils may occur to the playa surface. Vehicle traffic may change the surface roughness. Increased roughness will decrease the erosion rate. Increased roughness has reduced soil particles saltation, thus causing soil particles to accumulate forming transient dunes. The Burning Man event restricts vehicle movement within the event area to bicycles and vehicles used to provide oversight of the event. Restricting vehicular traffic will minimize adverse impacts on surface roughness. Increase vehicle use by other activities potentially year-long alters surface roughness. An increase in surface roughness decreases the distance that soil particles travel may decrease erosion by causing playa particles to accumulate. Soils on the playa fringe areas would be subject to wind erosion should off highway vehicle travel crush or remove vegetation. Event traffic may increase the potential for compaction on the playa surface in areas of high traffic volume. With restricted traffic movement by parking vehicles and only allowing event participants to use foot and bike travel, minimal or no impacts are expected to occur to the compaction of the playa surface.

### **Alternative 1 - No Action**

Under the *No Action Alternative*, impacts to soils or vegetation would not occur. Impacts from dispersed recreation would continue to vegetation and soil resources. Also, possible impacts to sensitive species such as the basalt cinquefoil, desert dace or Lahontan Cutthroat trout may continue, if any, from the No Action alternative by dispersed recreation use.

### **Alternative 2, Conduct Event at 2000 Location**

The environmental consequences to the soil are similar except for the potential of the proposed action to increase roughness of the playa surface in a new location. This could increase transient dunes that may migrate and impact the land speed course. The environmental consequences to soils and vegetation would be the same as the proposed action.

#### **4.3     Migratory Birds**

##### **Proposed Action**

The proposed action including implementation of proper clean up efforts would not adversely impact migratory birds. This conclusion is confirmed according to a conversation with Norman Saake, wildlife biologist (waterfowl specialist) for the Nevada Division of Wildlife (NDOW)

##### **Alternative 1, No Action**

Environmental consequences to migratory birds would be similar to the proposed action alternative. There would be no impacts to migratory birds.

##### **Alternative 2, Conduct Event at the 2000 Location-Agency Preferred Alternative**

Impacts to migratory birds would be the same as the proposed action..

#### **4.4     Sensitive Species**

##### **Proposed Action**

Sensitive species would not be adversely impacted from the proposal as no sensitive species have been identified within the event boundary or surrounding areas. There is a possibility of off site impacts to sensitive species should Burning Man participants use the Soldier Meadows area.

##### **Alternative 1 - No Action**

Environmental consequences to sensitive species would be similar to the proposed action alternative.

##### **Alternative 2 - Conduct Event at the 2000 Location - Agency Preferred Alternative**

Impacts to sensitive species would be the same as the proposed action.

#### **4.5     Water Resources**

##### **Proposed Action**

No adverse impacts to groundwater would result from implementation of the Burning Man event. Although groundwater is some 5-10 feet below the surface, the surficial soils consist of fine silts and clays which are stratified due the fluvial manner in which they are deposited. These soil conditions coupled with the upward hydraulic gradient should mitigate any unforeseen impacts.

Potential increased human visitation to hot springs by Burning Man participants may cause temporary adverse impacts from human use. These impacts would be similar to the use being received by other members of the visiting public. Cross country off highway vehicle travel would disturb vegetation and soils around the springs causing potential for wind erosion and subsequent sedimentation of the springs. Bathing in the hot springs would temporarily affect water quality as well as possibly changing water flow patterns near and around the springs through development of bathing facilities (pools, tubs, etc.).

The seasonal lake does not promote vegetation whether aquatic or shoreline. No pollutants generated from the event has been identified that would degrade surface, ground, or the seasonal playa lake water quality.

#### **Alternative 1, No Action**

The event would not be held, and potential adverse impacts to springs would not occur to vegetation, soils, or water quality.

#### **Alternative 2, Conduct Event at the 2000 Location-Agency Preferred Alternative**

Environmental consequences to water resources would be the same as the proposed action.

### **4.6 Air Quality**

#### **Proposed Action**

Activities associated with the *Proposed Action* would be a temporary source for airborne particulates and gaseous emissions. Vehicle travel along dirt roads and the playa surface may create fugitive dust and the possibility of sustained direct brown- or white-out events following Burning Man. Adverse air quality impacts from dust generated at the runway due to aircraft landing and taking off would also occur. However, these impacts would be localized in nature and would be of temporary duration. Temporary gaseous emissions would occur from vehicle and aircraft traffic in the area. These impacts would be of short duration and would quickly dissipate.

Other air quality impacts involve burning of synthetics as part of art burns and “The Man.” Synthetics may give off dangerous vapors and the participating public may not be aware of short-term consequences in breathing these vapors.

These impacts would also be localized and short term by nature. BRC and the BLM discourage burning of synthetics through public outreach and education.

## **Alternative 1, No Action Alternative**

Under the *No Action Alternative*, impacts to air quality from dust and gaseous emissions associated with the *Proposed Action* would not occur.

## **Alternative 2, Conduct Event at 2000 Location- Agency Preferred Alternative**

Air quality impacts from fugitive dust would be the same as the *Proposed Action*. Event activities would loosen dirt along roads and break up the playa crust creating potential for fugitive dust.

### **4.7 Solid Waste**

#### **Proposed Action**

Burning Man has instituted internal procedures prohibiting digging of pits for gray water and debris disposal. These procedures are further detailed in the "Operating Plan, Burning Man 2001" (Appendix 1) and include monitoring by BLM, Washoe County District and State Health personnel and the Black Rock Rangers for pit digging and improper/unauthorized waste disposal.

The *Proposed Action* may result in adverse impacts from solid waste (grey water) disposal by Burning Man participants. Despite Burning Man's prohibition on digging holes, past experience has shown that a small percentage of the participants have disregarded the prohibition and dug pits and disposed grey water in them. In Nevada grey water is, by law, sewage and such disposal is illegal. Other participants may have dug pits and buried other solid wastes rather than carry out their debris.

In addition to digging holes for waste disposal, participants will also dig holes to secure tent poles for camping and for other theme camp structures. Settling of pits would occur, because backfill dirt would get feathered out from trampling and other activity prior to filling the holes. This would result in settling and formation of depressions. Public safety issues could develop for motorists and other users from such pit depressions after the site is vacated.

In some authorized instances there would be a need to dig holes or pits such as for special effects, Art Burns, the Man, and a few other structures. Unless backdirt was containerized in each instance, the same problem of feathering and resulting pit depressions would occur.

Debris left on the playa after the event would adversely impact regional scenic qualities and items, such as screws or nails from art burns could puncture tires of other users. Burning Man participants would not be using visibly impacted existing sites. While the event would not focus recreational impacts on established (activity) areas, the proposed location has not been previously subjected to a large-scale event.

## **Alternative 1, No Action Alternative**

Under the *No Action Alternative* impacts associated with the *Proposed Action* would not occur. Potential surface pits on the playa would not develop and associated safety hazards would not occur.

## **Alternative 2, Conduct Event at 2000 Location- Agency Preferred Alternative.**

Impacts to the playa surface associated with solid waste disposal would be the same as the *Proposed Action*.

### **4.8 Land Use and Access**

#### **Proposed Action**

The Burning Man 2001 *Proposed Action* would provide access to the event through a BLM constructed access point (see Burning Man 2000 EA). The proposal would block off or deter other public land users from using one of the two access routes to the playa at the 12 Mile entrance.

There would be longer travel distances along the playa surface for people gaining access to the event from 3-Mile or BLM access points, causing additional adverse impacts to the playa surface from rutting, compaction, and erosion. Since there would be no gate into the event for people who use the 3 Mile access, additional impacts to the playa would be incurred by people turning around and the by those administering the event.(This access would be an administrative access). Within the event itself any pitting or rutting of the area would leave the playa surface unsailable for land sailors after the event until the winter rains arrive. The rains generally tend to heal and even out the surface. Damage such as pit depressions may possibly take several years to heal, and could potentially present safety hazards for landsailors.

The *Proposed Action* could adversely impact other permitted events as participants and dispersed recreation users would have to navigate around Burning Man before, during or after the Burning Man event, due to the in-place trash/security fence.

The playa is also used for land speed record attempts. The *Proposed Action* could cause surface impacts to the playa from pit depressions and tire rutting and would create safety concerns to future LSR attempts, especially if two or more contenders concurrently occupy the course. Such attempts require an extremely flat surface devoid of foreign objects and terrain features in order to maintain control of speed record vehicles.

Adverse impacts to jetcar safety could arise if any buried materials surface, resulting from Burning Man occupation or associated vehicular traffic.

Potential mitigation measures developed by the BLM to ensure public safety, such as entrance closures or camping restrictions may limit camping and access to areas of the playa for dispersed recreation users.

The *Proposed Action* is located in a section of the playa which tends to be drier where the surface dries out more quickly reducing the potential for participants from getting stranded or stuck should a rain event occur.

#### **Alternative 1, No Action**

Conflicts with other recreation users and access restriction concerns to the Black Rock City would not occur.

#### **Alternative 2, Conduct Event at the 2000 - Agency Preferred Alternative**

The agency preferred alternative would not block off or deter other public land users from accessing the playa at the 12 Mile access points. The event boundary would be further to the south and would not encroach upon this access point. The main access would be through the BLM access point.

### **4.9 Visual Resources**

#### **Proposed Action**

The Black Rock Desert playa has a visual resource rating of Class II (USDI: 1981). This area is extremely flat with wide open panoramic vistas. There would be temporary visual impacts from the Burning Man *Proposed Action* for non-Burning Man visitors accessing the desert. Lighting from Burning Man would be visible for several miles at night. The 50 foot tall wood sculpture known as “The Man,” would also be seen from long distances, especially at night. Visual impacts from the *Proposed Action* would be short term and would be quickly remediated by event take down and clean up as proposed in the “Burning Man 2000, Operation Plan.”

#### **Alternative 1, No Action**

Under the *No Action Alternative* visual impacts from the *Proposed Action* would not occur.

#### **Alternative 2, Conduct Event at 2000 Location-Agency Preferred Alternative.**

Visual resource impacts would be similar to the *Proposed Action*.

#### **4.10 Noise**

##### **Proposed Action**

Noise generated by the *Proposed Action* would shift from one location to another and possibly adversely impact recreational experiences of users, other than Burning Man, who might be camping in the vicinity. Noise would also occur during construction and removal of theme camps, landing and take off of aircraft, from music sources through out the event, and from the mass of people in attendance during certain times. Due to the large playa surface area, noise would attenuate rapidly. Other attenuation factors include topography, wind, and atmospheric absorption of sound. The *Proposed Action* would locate the event away some 9.3 miles from the nearest noise receptors in the town of Gerlach.

##### **Alternative 1, No Action**

Under the *No Action Alternative* noise associated with the *Proposed Action* would not occur.

##### **Alternative 2, Conduct Event At 2000 Location-Agency Preferred Alternative**

Noise impacts from this alternative would be similar to the *Proposed Action*.

#### **4.11 Public Safety, Event Security and Resource Management**

##### **Proposed Action**

The increasing size of the Burning Man event could adversely impact various cooperating agencies by increasing the need for law enforcement, medical, and security resources. Under the *Proposed Action*, Burning Man has committed to securing additional fire, medical, and security personnel to assist outside law enforcement. Interagency procedures for public safety and event security were analyzed and developed in the 1998, 1999 and 2000 environmental assessments. They are hereby incorporated by reference.

Coordination planning is ongoing for event 2001. Public safety, event security, and resource management procedures have also been identified in the "Burning Man 2001, Operating Plan." The *Proposed Action* would move the event further away from the railroad tracks which have presented past public safety concerns (see Burning Man 2000 EA)

Vehicular traffic around the perimeter of the event pose numerous safety concerns. Vehicles may interfere with campers using the area causing public safety concerns. Traffic within land sailing areas increase the potential for collisions. In addition, rutting of the playa surface from vehicles may cause safety issues to land sailors using the area. Vehicular traffic in and around the airport runway would create potential for aircraft and vehicle collisions. In addition, dust generated by both vehicles and aircraft would reduce visibility and increase the potential for collisions. Increase rutting from vehicles utilizing the area may create unsafe surfaces for aircraft to land on.



## **Alternative 1, No Action**

Under the *No Action Alternative* public safety and resource management impacts identified in the *Proposed Action* would not occur.

## **Alternative 2, Conduct Event At The 2000 Location-Agency Preferred Alternative**

Impacts associated with public safety, event security, and resource management would be the same as the *proposed action*.

### **4.12. Potential Mitigation/Monitoring Measures**

Mitigation is defined in the Council of Environmental Quality (CEQ) regulations §40 CFR 1508.20 and includes avoiding an impact, minimizing impacts and rectifying an impact by repairing, rehabilitation, or restoring the affected environment.

Mitigation measures from previous Burning Man environmental assessments would also apply where warranted and are hereby incorporated by reference. Based on analysis, the following additional possible mitigation measures have been identified. The Proposed Action or *Alternatives* to which the mitigation measures apply are identified in parenthesis following each measure.

### **Cultural Resources, Native American Values, Paleontology**

Previous permit stipulations adequately addressed cultural resources in previous permits and are hereby incorporated by reference.

- 1.) A BLM archaeologist or District Archaeological Technician is required to be present during digging of any authorized pits or holes.
- 2.) BRR's and other volunteers who participate on spring patrols would be required to take orientation training addressing safety, area ecology, and cultural resource protection.

### **Air Quality**

- 3.) Implement dust suppression efforts to keep fugitive dust at a minimum during event operation, including prior to event exit and to the entire site after the event exit is completed, to fix dust to the playa surface (Proposed Action, Alternative 2)
- 4.) Provide continual dust suppression efforts where needed to the airport runway prior to take off and landings to ensure good visibility for pilots (Proposed Action, Alternative 2.).

- 5.) Present public education (through Burning Man website, radio stations, brochures and other literature) to encourage that couches and anything containing synthetic materials not be burned (Proposed Action, Alternative 2).

### **Land Use & Access**

- 6.) To reduce use conflict impacts with other users, reduce the period of layout/setup to two weeks before the event (Proposed Action, Alternative 2).
- 7.) To reduce use conflicts with other users, reduce the period required for takedown/cleanup after the event to two weeks (Proposed Action, Alternative 2 ).
- 8.) To reduce potential use conflict impacts with other users, reduce the area required for the event (restrict event site to smaller area) (Proposed Action, Alternative 2 ).
- 9.) To restrict traffic to entering/exiting the event from County Road 34, and prevent exit traffic to other playa areas, fence and actively patrol entry approach road leading from BLM entrance to event (Proposed Action).
- 10) Erect caution signs and lighting along County Road 34 north and south from event access to forewarn travelers of safety hazards and the event ahead (Proposed Action & Alternative 2, ).
- 11) Install BLM truncated signs, or signs approved by the BLM, with map and directional arrows at County Road 34 and BLM access point, and at other strategic locations, informing the public that the playa is open to recreational use in other than the Proposed Action location (Proposed Action).
- 12) Install signs approved by the BLM with directional arrows informing the public that the playa is open to recreational use in other than the Proposed Action location (Alternative 1, Alternative 2).
- 13) Establish and staff additional exits during high volume traffic times (Proposed Action, Alternative 2).
- 14) During the event period enforce a “No Shooting Closure” for 3 miles in all directions from the event boundary (Proposed Action, Alternative 2).
- 15) During the event period, with exception of an authorized Burning Man landing strip for Burning Man participants, enforce an “Aircraft Landing Closure” for 7 miles in all directions from the event boundary (Proposed Action, Alternative 2).
- 16) Repair any damage to playa access and county roads attributed to the event (Proposed Action, Alternative 2).

## **Public Safety, Event Security, Resource Management**

- 17) During the event period, with exception of an authorized “Pilot Camp” and BLM-authorized event-management-related camps, BLM would enforce a “No Camping Closure” for 1 mile in all directions from the event boundary (Proposed Action and (Alternative 2, Agency Preferred Alternative).
- 18) In order to provide for public safety in and around the runway and event perimeter, close off the 3-Mile access point to the playa to deter vehicle traffic from entering the area which may interfere with aircraft, landsailors, and event security. (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 19) After event closure, assure that all event roads are smoothed by dragging and watering (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 22) Immediately after event closure, water the entire site, including airstrip, and within the trash/security fence to fix dust to the playa surface (Proposed Action, Alternative 2, Agency Preferred Alternative ).
- 23) Erect signs and lighting, including LED strips, outlining a buffer zone around the event and fenced entry approach road (proposed as a mitigation under “Land Use and Access”) to forewarn travelers of safety hazards and the event ahead (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 24) Provide monitors during heavy traffic periods (prior to, during exit, and after the event) on top of hill on County Road 34 immediately west of the BLM entrance/exit to warn traffic controller of oncoming traffic. (Proposed Action & Alternative #2, Agency Preferred Alternative).
- 25) Provide state certified traffic controllers at key locations (County Road 34 entrances/exits, State Route 447/County Road 34 “Y,” Gerlach and Empire) during heavy traffic periods (prior to, during exit, and after the event) to keep traffic moving steadily (Proposed Action, Alternative 2, Agency Preferred Alterantive).
- 26) Provide caution signs on County Road 34 north and south of the BLM entrance/exit to warn of hazardous crossing/traffic condition ahead. (Proposed Action and Alternative #2, Agency Preferred Alternative).
- 27) Install fencing and implement full-time intensive patrol of Union Pacific railroad tracks adjacent to the event
- 28) To further move the site from the U.P. railroad tracks, redesign site layout to a U-shape, triangle-shape or other design

- 29) Actively enforce existing state and federal drug laws. (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 30) Post anti-drug use rules, perform periodic radio broadcasts, and follow illegal substance policy as identified in the "Burning Man 2001 Operations Plan (Proposed Action, Alternative 2, Agency Preferred Alternative.)
- 31) Prohibit burning of objects or structures that contain screws, nails, other non-burnable materials, plastics and synthetics (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 32) Develop and implement fire works safety procedures (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 33) Implement a follow-up site inspection the following Spring, after seasonal weathering, to determine any latent adverse impacts, such as pit depressions, bumps or surfacing buried materials, to insure that the site is in pre-event condition, such as areas that were perfectly smooth. Rehabilitate to identified standards (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 34) Burying of waste material of any kind is not authorized (Proposed Action, Alternative 2, Agency Preferred Alternative).
- 35) BRRs and BLM personnel will monitor the entire event site for digging of unauthorized pits and holes.
- 36) Insure that land speed record trackway areas superimposed by Burning Man are left perfectly flat and without any disruption or pit depressions. Land speed record representatives could participate (Proposed Action Alternative).
- 37) Inspect event site during final inspection through the use of at least three randomly placed transects throughout the site and a measurable cleaning standard in which the ground will be intensively collected by the inspecting party (Proposed Action and Alternative #2, Agency Preferred Alternative).
- 38) Post-Event Clean Up Standard. For any random transect of 100 feet wide by 1,500 feet long (150,000 square feet), any collected debris laid out in a single layer will not exceed 2.25 square feet. No more than 50% debris may be organic materials. The size of any one item will be no larger than a quarter (coin). (Proposed Action & Alternative #2, Agency Preferred Alternative).

- 39) Establish a minimum tolerance of non-native playa materials (metal, plastic, fabrics, wood, food remains) in any randomly selected transects throughout the Burning Man event site during post-use final inspection (Proposed Action & Alternative #2, Agency Preferred Alternative).
- 40) Prior to permitting of future events, clean up debris and burn scars which are extant or have surfaced at the 1996 and 1998 sites by dates set by BLM (Proposed Action, Alternative 2).
- 41) Unless significant adverse effects occur, do not move event site for 3-5 years. Burning Man would be responsible for complete rehabilitation of any such effects (Proposed Action, Alternative 2).

#### **4.13 CUMULATIVE IMPACTS**

Cumulative impacts are those effects on the resources of an area or region caused by the combination of existing and reasonably foreseeable future projects which may be individually minor, but together become significant. Although impacts from the *Proposed Action* are temporary, this event occurs on an annual basis, and impacts identified in this analysis could be cumulative.

For discussion purposes, the cumulative impact assessment area for this Environmental Assessment (EA) would be the west arm of the Black Rock Desert. Reasonably foreseeable actions most likely to occur in the assessment area would include annual Burning Man Events, other special recreation permit (SRP) events and continued dispersed recreational use. Based on the types of multiple recreational usage, there would be cumulative impacts to the playa and surrounding areas. Reasonable foreseeable impacts would occur should the Burning Man event continue to be held annually in combination with the other SRPs that occur on the playa.

Given that The Burning Man event has occupied various playa areas in the past, cumulative adverse impacts have occurred at various locations on the playa surface including rutting, compaction, and buried debris causing adverse impacts to other recreational users. These users include landsailors, land speed record organizers, and other recreational users which need a relative smooth playa surface to enhance their recreation experience. There would be no long term adverse cumulative impacts to water resources, sensitive species, and migratory birds. The Burning Man event may cause cumulative adverse impacts to other regional resources due to increased public awareness of the Black Rock Desert playa and region. Burning Man participants may return to the area as dispersed recreation users.

The proposed action would partially expand the area of cumulative impacts from the 2000 event site to a new location on the playa. Long term cumulative impact monitoring would be hampered as new baseline data would have to be established and the 3 year monitoring cycle (see 2000 event EA) would be delayed.

Under the Alternative #2 - Agency Preferred Alternative - Impacts to the playa would be limited to the 2000 event location and would allow for long term monitoring and quantifying of cumulative impacts to the playa.

Mitigation and monitoring measures have been previously identified which would reduce or eliminate potential adverse cumulative impacts, these may result from a decision to implement the proposed activity or alternatives.

## **5. *CONSULTATION AND COORDINATION***

### **5.1 List of Preparers and Reviewers - Bureau of Land Management**

Mike Bilbo, Outdoor Recreation Planner  
Jeff D. Johnson, Environmental Coordinator, Author  
Peggy McGuckian, Archaeologist  
Randy Reader, Law Enforcement Ranger  
Les Boni, Assistant Field Manager, Non-renewable Resource Division  
Barb Keleher, Outdoor Recreation Planner  
Rodger Bryan, Supervisory Wildlife Biologist  
Wendy Fuell, Wildlife Biologist  
Mike Zielinski, Soil Scientist  
Craig Drake, Hydrologist

### **5.2 Agencies Contacted And/or Consulted**

Federal Aviation Administration  
Pershing County Commissioners  
Pershing County Sheriff  
Washoe County Commissioners  
Washoe County Sheriff  
Washoe County District Health Department  
Washoe County Road Department, Gerlach-Vya  
Truckee Meadows Fire Protection District  
Gerlach Volunteer Fire Department  
Gerlach Justice of the Peace  
Gerlach General Improvement District  
Gerlach Citizen's Advisory Board  
Regional Emergency Medical Services Authority (REMSA)  
North Tree Fire, Inc.  
Nevada Bureau of Health Protection Services  
Nevada Department of Transportation  
Nevada State Historic Preservation Officer  
Nevada Department of Transportation  
Summit Lake Paiute Tribe  
Pyramid Lake Paiute Tribe  
Lovelock Paiute Tribe

McDermitt Paiute Tribe  
Black Rock City L.L.C.  
U.S. Fish & Wildlife Service (USF&WS)  
Nevada Division of Wildlife (NDOW)

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2000 Letter - File No. 1-5-01-SP-006

